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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/446,831 02/17/00 WOB BEN

A 7468.178USWO

023552
MERCHANT & GOULD
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MINNEAPOLIS MN 55402-0903

MMC2/0620

EXAMINER

LAM, T

ART UNIT

PAPER NUMBER

2834

DATE MAILED:

06/20/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/446,831

Applicant(s)

Wobben

Examiner

Thanh Lam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 10 20) ☐ Other:

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

The following order or arrangement is preferred in framing the specification and, except for the reference to "Microfiche Appendix" and the drawings, each of the lettered items should appear in upper case, without underlining or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) Title of the Invention.
- (b) Cross-References to Related Applications.
- (c) Statement Regarding Federally Sponsored Research or Development.
- (d) Reference to a "Microfiche Appendix" (see 37 CFR 1.96).
- (e) Background of the Invention.
 1. Field of the Invention.
 2. Description of the Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) Brief Summary of the Invention.
- (g) Brief Description of the Several Views of the Drawing(s).
- (h) Detailed Description of the Invention.
- (i) Claim or Claims (commencing on a separate sheet).
- (j) Abstract of the Disclosure (commencing on a separate sheet).
- (k) Drawings.

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(l) Sequence Listing (see 37 CFR 1.821-1.825).

3. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-15 provide for the use of the method for generating electrical energy, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 1-15 are rejected under 35 U.S.C. 101 because the claimed recitation of a use of the method/process, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

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Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Wang et al.

(WAVEFORM OPTIMIZATION DESIGN OF AN AC CONVERTER MACHINE, 5/25/89).

Wang et al. disclose a method for generating electrical energy by means of a synchronous generator (fig. 4) with generator stator with a stator winding and a generator rotor, movable relative to the stator, which comprises poles and induces an electrical voltage in the stator winding when a stator current flows through the stator winding or several stator windings are rectified by means of a rectifier circuit (fig. 10), and the sum of the component currents of the stator windings yields a nearly constant direct current.

Regarding claim 2, the stator contains a 6-phase stator winding, whereby two phases form a phase pair, and the addition of the currents of a phase pair essentially matches the time behavior of the voltage induced in the corresponding phase windings.

Regarding claim 3, the voltage induced in the stator has a trapezoidal shape (fig. 1), which in a Fourier analysis contains a minimum of high frequency components.

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Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. in view of Templeton.

Wang et al. disclose all aspect of the claimed invention except for the use of a capacitor of the rectifier circuit to rectify the sum of the component currents to be smoothed to a nearly constant direct current.

Templeton discloses a capacitor (81) of the rectifier circuit to rectify the sum of the component currents to be smoothed to a nearly constant direct current the purpose of using the capacitor to filter out the component current to a nearly constant current.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the rectifier circuit as taught by Wang et al. and to distribute the capacitor of Templeton in order to improve the direct current as constant as possible.

10. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. In view of Templeton as applied to claim 1-4 above, and further in view of Li et al.

Wang et al. and Templeton disclose all aspect of the claimed invention except for the poles of the rotor are arranged in different pole distances.

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Li et al. disclose a rotor (21) the poles of the rotor are arranged in different pole distances (25) for the purpose of reducing noise and vibration of the generator.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the combination structure of Wang et al. and Templeton to adapt the rotor as taught by Li et al. in order to reduce noise and vibration of the generator.

11. Claims 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. in view of Templeton and Li et al. as applied to claim 1-5 above, and further in view of Susumu (JP abstract).

Wang et al., Templeton, and Li et al. disclose all the aspect of the claimed invention except for the rotor pole structure and the arrangement of the rotor poles.

Susumu discloses the rotor pole structure and arrangement of the rotor poles as claimed in claims 8-15 of the application.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the combination structure as disclosed by Wang et al., Templeton and Li et al. and modify and adapt with the rotor poles as taught by Susumu in order to reduce noise and vibration of the generator.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

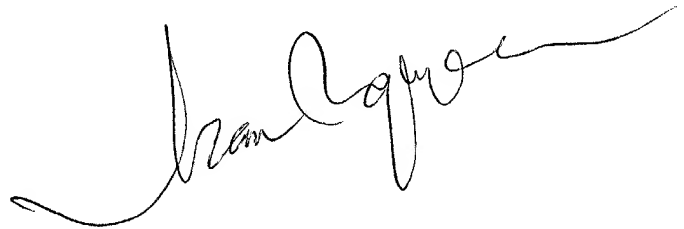
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3431.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.



Thanh Lam

June 15, 2001

Primary
Tran Nguyen
Patent Examiner
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